Data Science Project Report

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Abstract

Covid 19 is not a new disease for humanity. From past to present,humanity has seen many epidemics. Today, with the development of technology,it is easier to fight these epidemics than in the past. Machine learning is one of the methods that people use most in these studies. This project is an example of how many people we predict will lose their lives in the coming years.

Project Description

To solve the problem in this project, Facebook’s Prophet library,which is used for data science,was used. Other than that,general libraries were used.

Project Implementation

For this project I have used Spyder(python 3.9) as development environment and Python as the Language. Prophet is a python library. To install Prophet,I installed Pystan and C++ compiler beforehand. I used matplotlip library to visualize the data. There are different ways to make a time series with the Pandas library, but Prophet makes things easier. I have done the necessary data preprocessing steps. We bulit and trained our model. We can make a prediction about how many people will die. Prophet uses linear regression by default. Cross validation was used to see the performance on the data that the model did not see. In this way, we got a better result. For this, I used import performance\_metrices in the library. The root mean square method was used to find the error rate between the actual data and the predicted data.

Necessary Files

<https://www.spyder-ide.org/>

<https://www.kaggle.com/sudalairajkumar/novel-corona-virus-2019-dataset>

<https://facebook.github.io/prophet/>