TRACKING AND PREDICTING EPIDEMICS FROM SPACE THROUGH REMOTE SENSING AND MACHINE LEARNING

Problem Statement-

No one knows how much a pandemic can affect us unless it has already destroyed some lives, so what if we had a model which will predict the intensity of the pandemic. Sounds interesting right, so the idea of our project will be to build an epidemic prediction model to prevent spreading epidemics in a certain place. Specially by using satellite data that focuses on a region's landscape, vegetation, concrete structure, water bodies, presence of air pollution causing gases in the atmosphere, For the region that can pinpoint conditions which are favourable for harbouring various epidemic hosts, indicating where people are at greatest risk. As the communication and logistics system became stronger day by day, the rate of moving pandemic causing agents throughout the world became faster too. So knowing the prevention and the deadliness of the virus beforehand is important.

USE CASE-

1. My aim is to use this project for the welfare of the community
2. Private and Non Private organization can predict the epidemic to prevent academic loss.

Problem Faced-

1. Collecting the satellite dataset is difficult
2. Datasets are mostly cloud covered, accuracy compromised
3. Need to use static data for daily infected cases tracking

Future Scope-

1. Can be implemented as s web app so an individual can measure the infected rate of a place by standing a particular gratitude.
2. Accuracy can be improved.