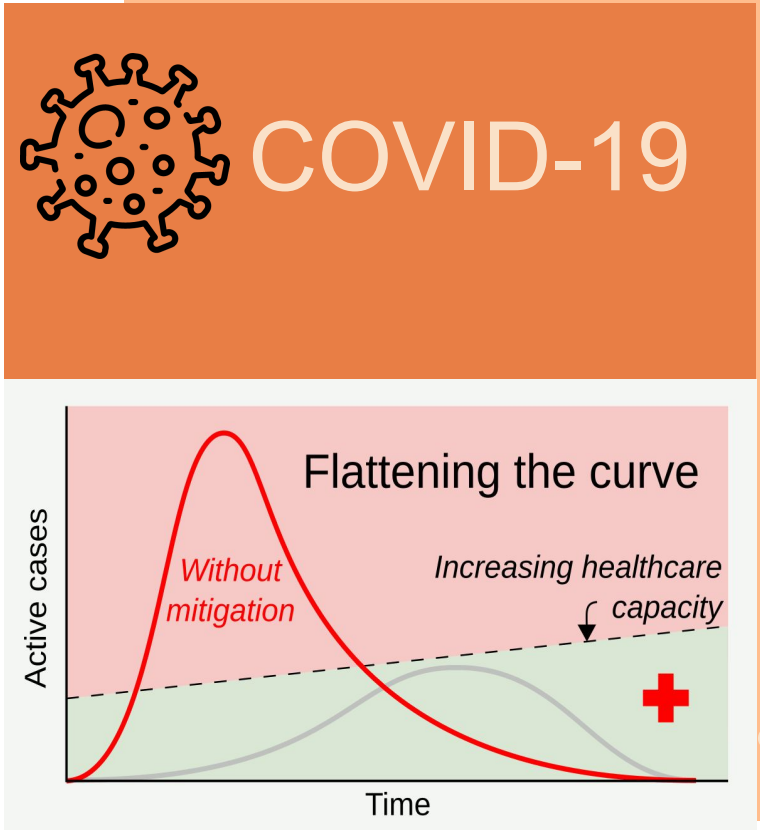
Visualize the trend of COVID-19 with machine learning empowered spread prediction

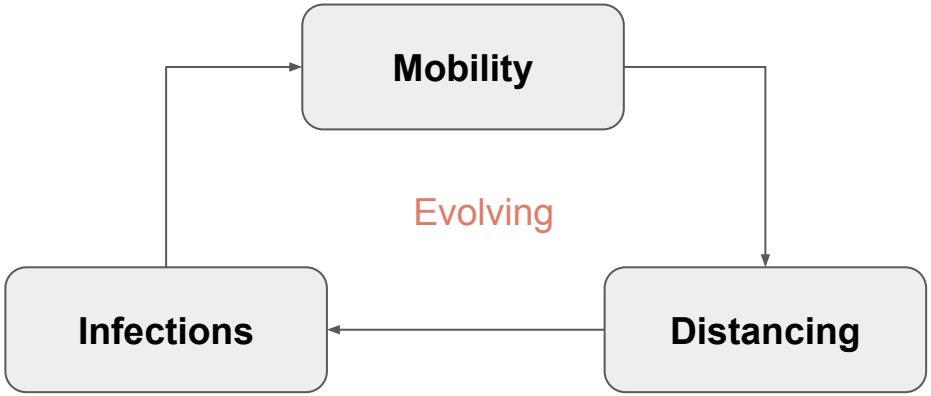
Team Alpha:
Pengyu Chen, Qiaoyun Peng, and Yue Wang

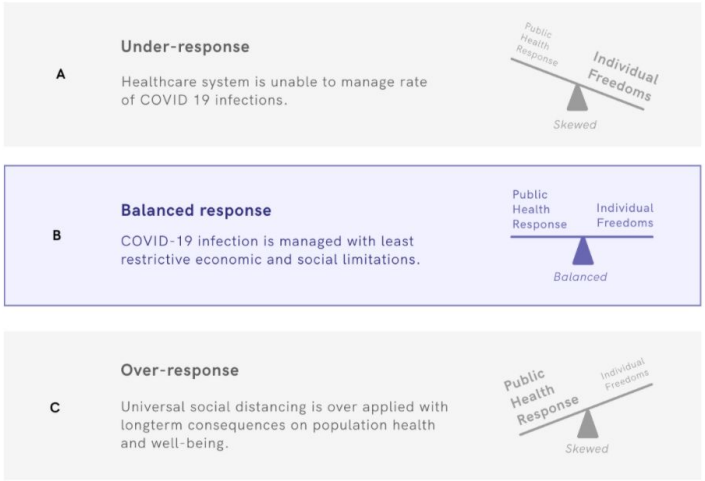
C3.ai challenge

Managing the curve

How to achieve a balanced response?





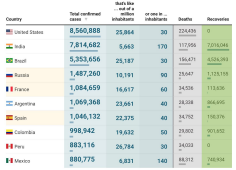


C3.ai challenge

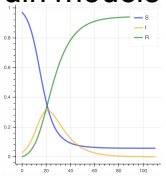
Source: wikipedia

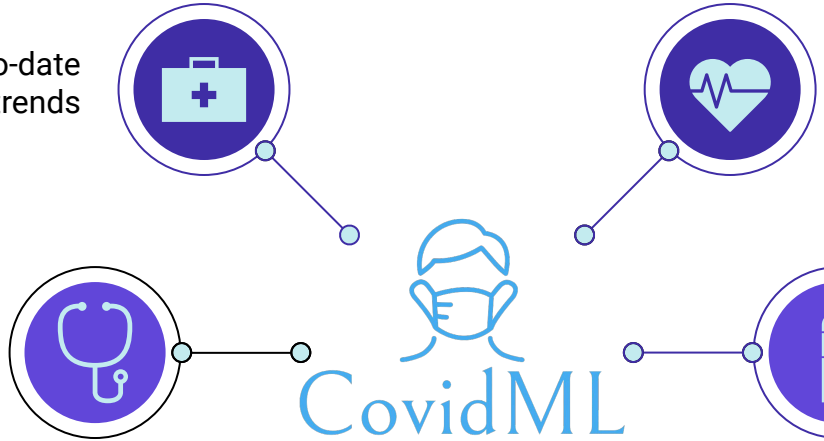
OUR SOLUTION: method

Visualize up-to-date trends

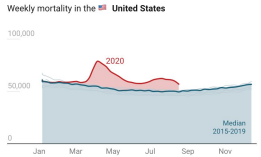


Train models

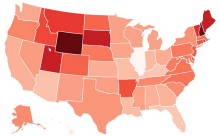




Real-time predictions



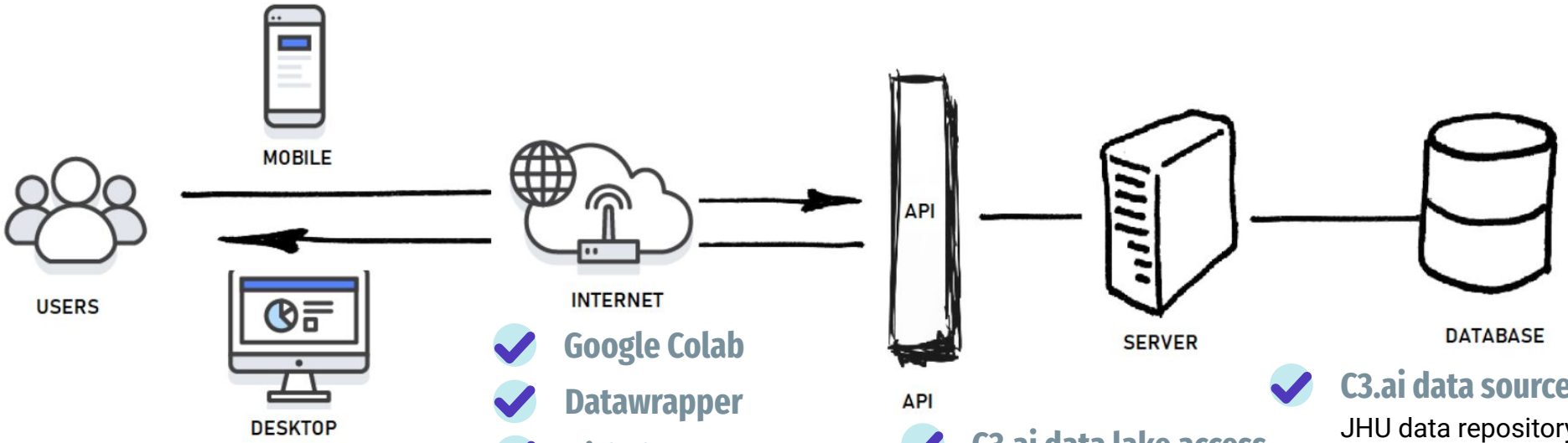
Mobility changes



What We Did

- Harness data science and analytics to a dynamic approach of data collection, analysis, and forecasting to inform policy decisions in real time and iteratively optimize public health recommendations for re-opening given measurements of virus activity and suppression measures including social distancing.

OUR SOLUTION: workflow



Heroku
host client accessing website

Google Colab

Datawrapper

Github
execute Python code & make predictions with fully-trained models

C3.ai data lake access
get data in real time

C3.ai data sources
JHU data repository
Google/Apple mobility reports
New York Times

CovidML

DEMO