VACCINE TRENDS

MUNI KANAKA SRI SHALINI CHINTAM

ABHINAY YADAV
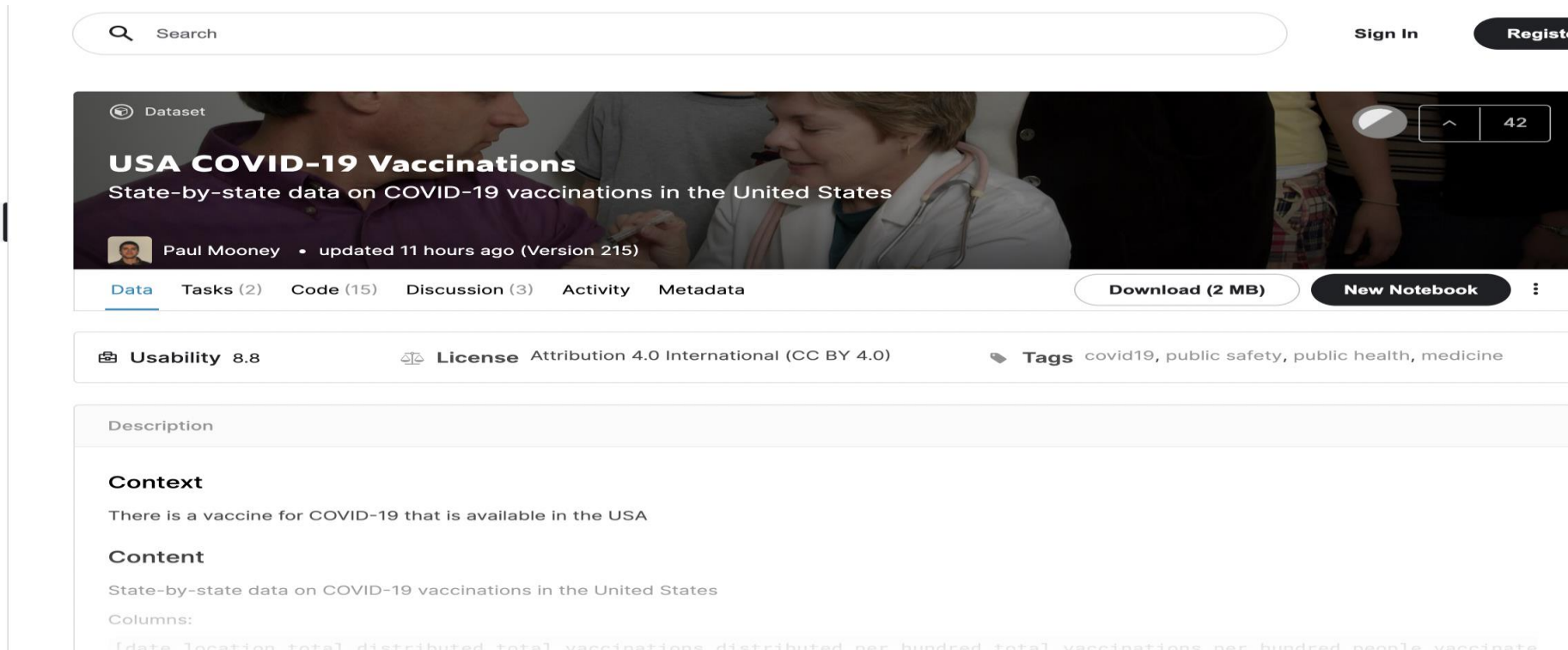
SAI KUMAR GORRE

ANIL NANDIKONDA

THE STORY

- Edward is a 23-year-old college student. He likes to travel all over the USA but due to the pandemic he has stopped travelling and he wanted to start travelling once again but he wanted to be travel to the states which have high vaccination rates in an order to be safe as the virus is still there and mutating and he wanted to see in his intended date to travel what would be the vaccination rate of that particular state.

FEATURES OF OUR APPLICATION:

- It would visualize the vaccine trends of various states of the USA on a monthly basis.

- If you give forecasted vaccination rate of that state or states for the next 90days if you wanted to know about various states.

- Based on the forecast it will tell you if it would be better to go state or not

DATA

- The data source:

https://www.kaggle.com/paultimothymooney/usa-covid19-vaccinations

THE DEEP LOOK INTO THE DATASET.

The dataset contains these columns.

- Location: it displays the name of the state where the observation is recorded.

- Date: it displays the date at which the particular observation is recorded.

- Total_vaccinations: it displays the total number of doses of vaccinations that are done.so the count increases by one whenever the   vaccination is administered irrespective if it is 1st or 2nd dose.

- Total_vaccinations_per_hundred: it is the total vaccinations per hundred by state total population.

- Daily_vaccinations_raw: it is a rough average of the number of doses done on that particular day.

- Daily_vaccinations: it displays the number of doses of vaccination done on that particular date

- Daily_vaccinations_per_million: daily vaccination per million by the total population of the state. ● People_vaccinated: no of people who have received at the minimum of one dose.

- People_vaccinated_per_hundred: number of people vaccinated per hundred by the total population of the state.

- People_fully_vaccinated: the count of a total number of people who have received all the doses. ex: if that person has taken the Johnson and Johnson then it would have only one but when it is Pfizer the number of doses required would be two to say that the person is fully vaccinated.

- People_fully_vaccinated_per_hundred: people who are fully vaccinated per 100 by the total population of that state.

- Total_distributed: the total count of doses of vaccines distributed by the CDN.

- Total_distributed_per_hundred: the total count of vaccines that are distributed per hundred people by the total population of the state.

- Share_doses_used: the count of the number of doses done that are stored and shipped by the CDN.

WEBSITE

- The Website gives the various visualizations of the covid vaccinations in the United states.

- It provides the information about the distribution, utilizations of the distributed vaccines in United States.

- It also provided the nearest vaccination Center and information to check whether a person is eligible to give the vaccine.

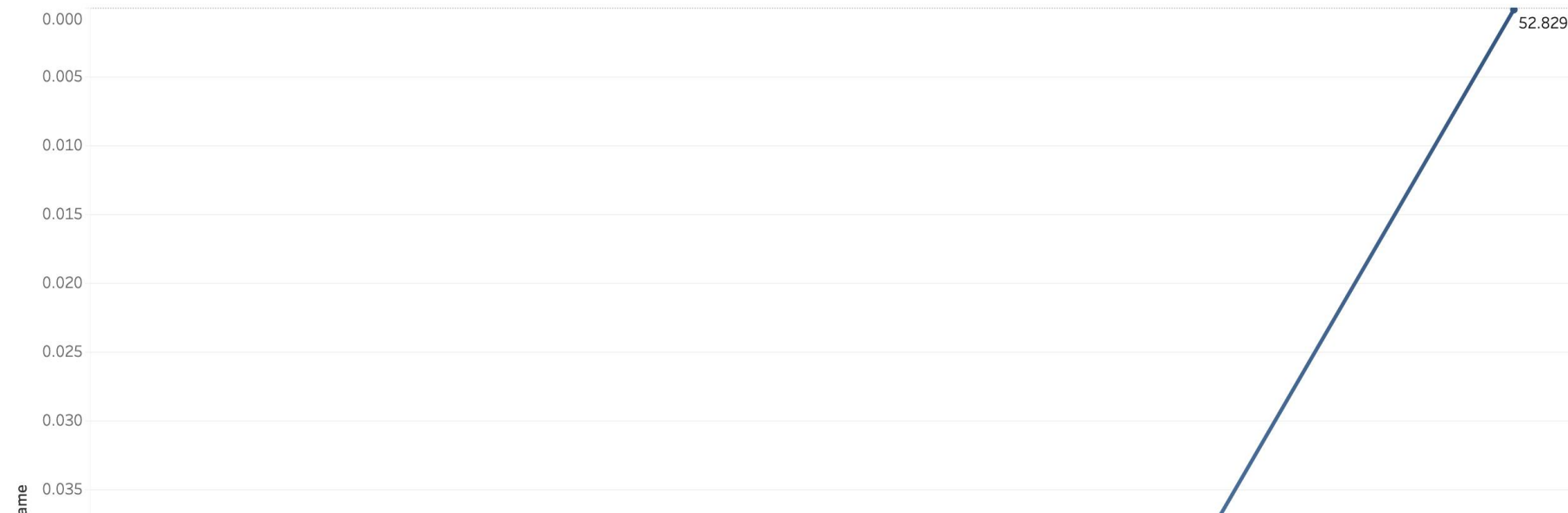# Vaccine Trends

Know More

Source: Fusion Medical Animation

Forecasting

Select the State you want to get the Forecasting For

Alabama ⌄

Missouri State Prediction

Percentile (10) of Results ...

50.103   52.829

52.829

Bubble graph shows the distribution of vaccines of various states

distribution of vaccines based on state
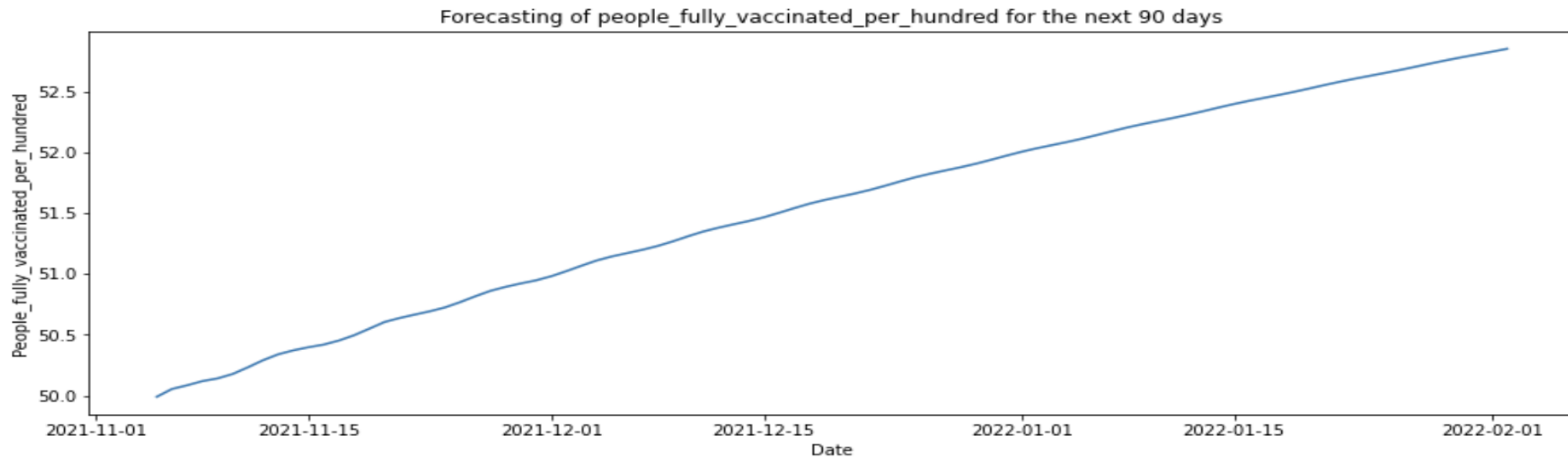
Total Distributed

6,411,720   11B

Darker the color the greater the amount of vaccines that have been distributed to that particular state

+ableau

MACHINE LEARNING

- We have used ARIMA(AutoRegressive Integrated Moving Average) model to generate the forecasting of Fully vaccinated per hundred for the next 90 days for all the states of United States.

Forecasting of people_fully_vaccinated_per_hundred for the next 90 days

WORK DISTRIBUTION

- **MUNI KANAKA SRI SHALINI CHINTAM – VISUALIZATIONS AND ML**

- **ABHINAY YADAV – FRONT END**

- **SAI KUMAR GORRE- ML**

- **ANIL NANDIKONDA -FRONT END**

REFERENCES:

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- https://www.cnn.com/interactive/2021/health/global-covid-vaccinations/

- https://www.statista.com/statistics/1194939/rate-covid-vaccination-by-county-worldwide/