Title Page	Introduction	What is Covid?	How is it transmitted?	Where is it transmitted mostly?	How do we know this?	Egypt



The Gradient Boost Data Challenge

Title Page Introduction What is Covid? How is it transmitted? Where is it transmitted mostly? Egypt



#### Overview

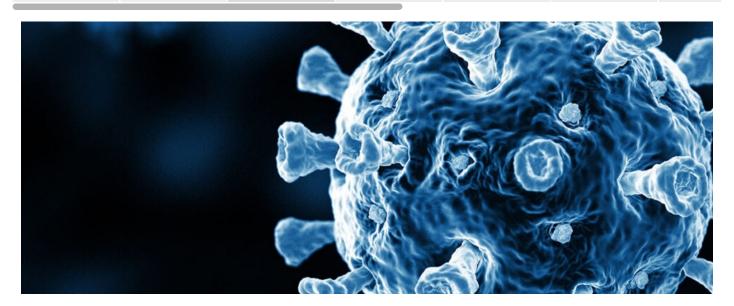
Gradient Boost is a marketplace of live low-cost courses delivered by professionals working as Data Scientists, Data Analysts, Data Engineers, Software Engineers and Product Managers across Africa.

#### The Challenge

Using the data and limiting your scope to data between 1 February 2020 and 1 August 2021, create plots, time series forecasts and any other analysis revealing interesting insights about COVID-19 infection, recovery, growth and fatality rates amongst African countries of your choice and in your own words put forward hypotheses around why these differences may have occurred.

I would be comparing Egypt, Ethiopia, Nigeria and South Africa.

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#### **METHODOLOGY**

Covid-19 the pandemic that swept through the world in 2019, Wuhan, People's Republic of China. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year. I would be drawing insights on its Infection, Recovery, Death and incident rates in 4 African countries.

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#### **Covid Infection**

We know that the disease is caused by the SARS-CoV-2 virus, which spreads between people in several different ways.

The "Three C's" are a useful way to think about this. They describe settings where transmission of the COVID-19 virus spreads more easily:

- 1. Crowded places;
- 2. <u>Close-contact settings</u>, especially where people have conversations very near each other;
- 3. Confined and enclosed spaces with poor ventilation.

The risk of COVID-19 spreading is especially high in places where these "3Cs" overlap.

Introduction

What is Covid?

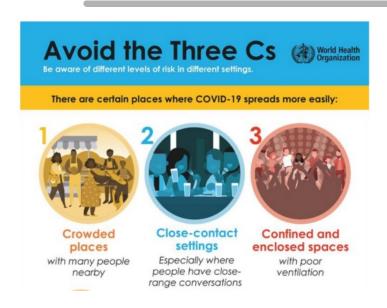
How is it transmitted?

Where is it transmitted mostly?

How do we know this?

Egypt

Ethiopia



#### The Airport

Covid was brought into Africa, like other countinents through airports by International flights either by returning citizens or International visitors and tourists. Sadly the 3Cs overlap due to the huge traffic of people in an airport. Before Covid

- Egypt's Cairo International Airport traffics 30 million passengers annually
- Ehiopia's Addis Ababa Bole International Airport traffics 6 million passengers annually,
- Nigeria's Murtala Muhammed International Airport traffics 12.79 million people annually
- South Africa's O. R. Tambo International Airport traffics 21 million people annually.

Post-Covid sancations were later introduced to reduce the traffic. I believe the number of international flights greatly influences the COVID-19 cases in a country

What is Covid?

How is it transmitted?

Where is it transmitted mostly?

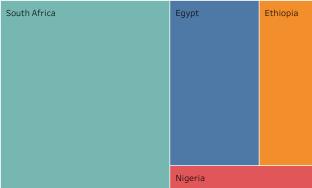
How do we know this?

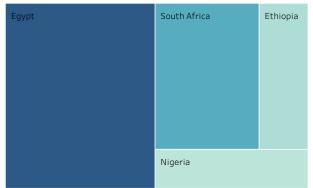
Egypt

Ethiopia

Nigeria



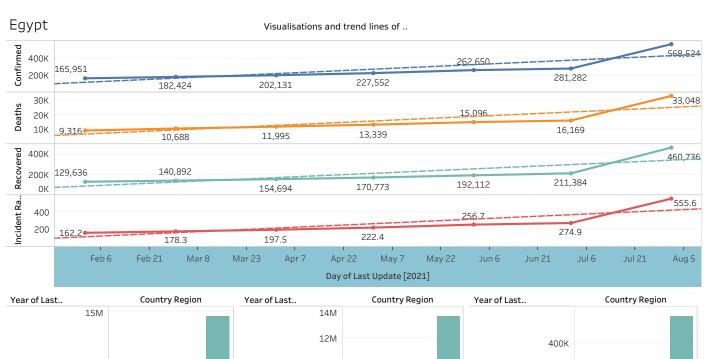


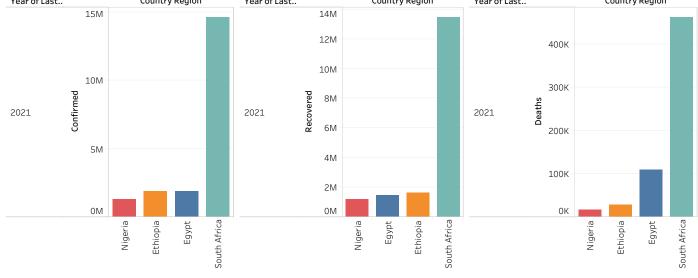


Lets see airport passengers data to support these claims click the visualization above

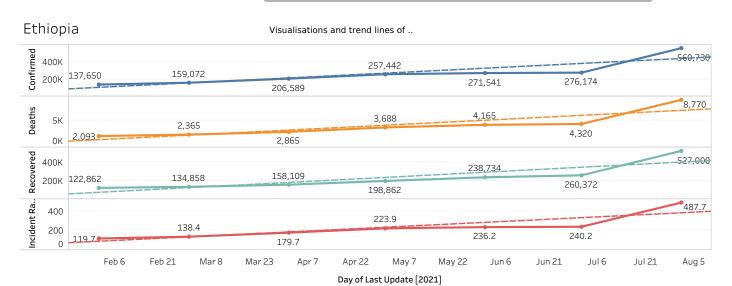
Lets see airport Tourists data to support these claims click the visualization above

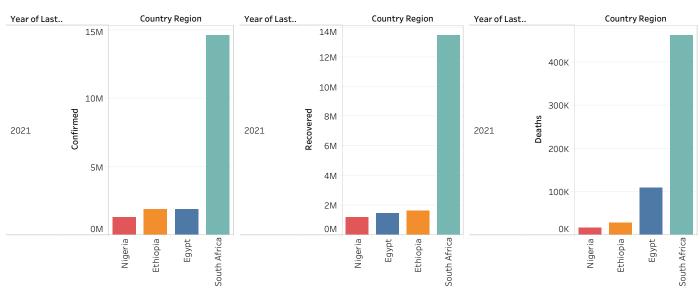




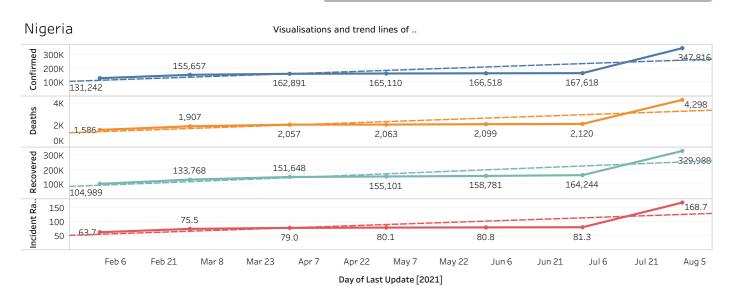


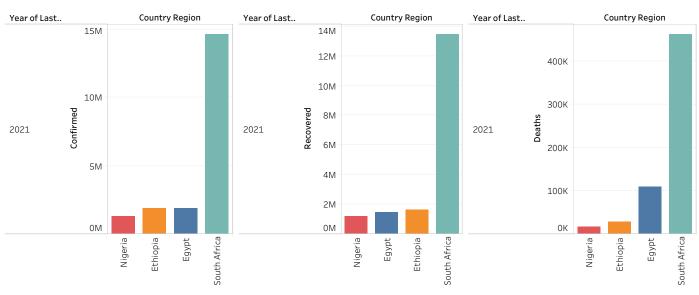




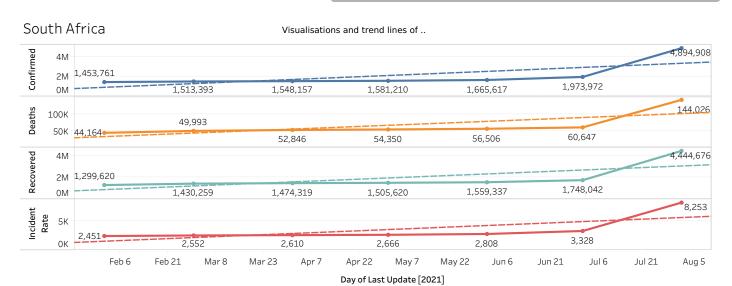


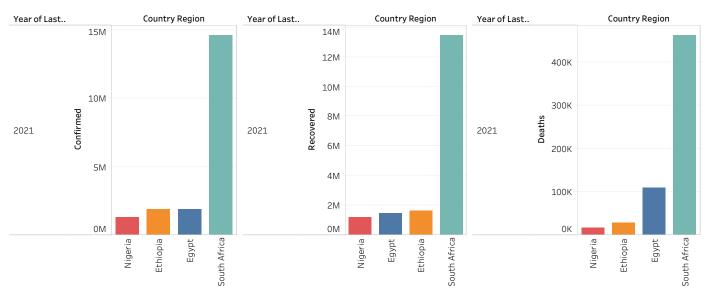






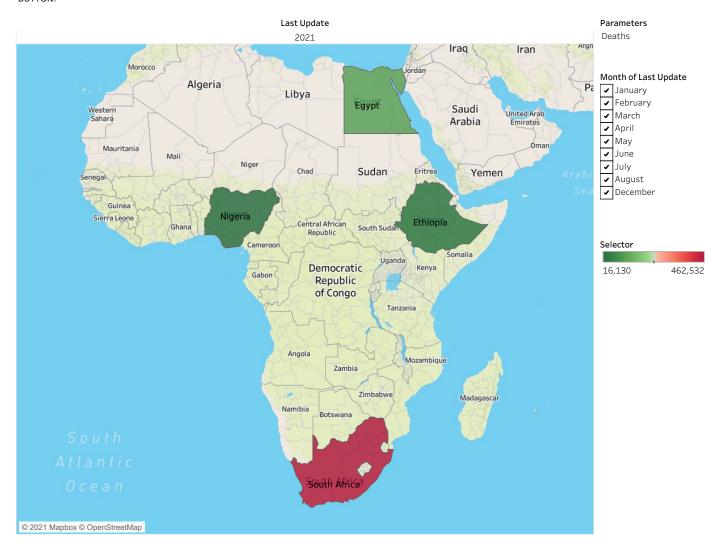
How do we	Egypt	Ethiopia	Nigeria	South Africa	Country View	Conclusion
know this?						





Но	w do we	Egypt	Ethiopia	Nigeria	South Africa	Country View	Conclusion
kno	ow this?						

HOVER ON EACH COUNTRY FOR DETAILS AND CHANGE PARAMETERS DEATHS, RECOVERED, CONFIRMED CASES AND INCIDENT RATE AT THE CLICK OF A RUITTON



How do we know this?

Ethiopia Nigeria South Africa Country View Conclusion



#### TheGradientBoostDataChallenge

In conclusion,long-distance travellers are the main carriers of COVID and airports being the most preferred mode of long distance transportation is the place where most COVID-19 transmission took place. Thank you for this oppourtnity.