The coronavirus is the large group of diseases that includes symptoms such as the common cold and other respiratory infections. It is also known as COVID-19 since it was first found in 2019. The first cases were detected in Wuhan, China on New Year's Eve. They are still being investigated to find their exact origin. It was first discovered after a series of severe pneumonia cases. This virus is different from any other pandemic that has occurred before. It's sneaky in the sense that this virus is highly transmittable and can easily spread from person to person even before symptoms develop. It is carried in respiratory droplets when we speak, sneeze, and cough, and these infected droplets can land on surfaces. The virus can also survive on non-breathing objects for a few days. A person can become infected with the virus if they come in contact with these surfaces and then touch their mouth, nose, or eyes.

Various technologies including artificial intelligence and machine learning provide different analysis methods and algorithms to attack the COVID 19 virus. Trace Tracker is one of the applications that caught my attention. When both users have the application, it can share information about the proximity of participants. It was first launched in Singapore, and now many companies are trying to develop similar application functions. It uses an indicator of the relative strength of Bluetooth signals between devices to roughly determine the distance and duration of a meeting between two users. The Ministry of Health (MINSA) affected by COVID 19 will work with them to map the activities of the past 14 days and track contact details. Once a person has installed the Trace Together app, they can give the Ministry of Health access to its Trace Trace, Bluetooth proximity data, allowing the Department of Health to communicate with people in close contact with the infected person more quickly, as well as to consult and obtain support.

Big data plays an important role when a large amount of data needs to be examined to uncover hidden patterns and correlations. Understand the user based on their behavior and preferences. Big data enables instant data analysis. For example the Trace Tracker app mentioned above. It would have a large amount of data for a single user as it tracks and stores every person the user comes close to. Such an analysis in the conventional solution would take longer and could lead to interruptions. Another scenario can be Netflix where all users see the history and the algorithm also saves all the movies / TV shows that the user sees. The Netflix recommender correlates data from multiple users. The system then suggests movies that the user is watching with similar interests. There are millions of users keeping up to date with all of this data and information. It would take a lot longer, but with the help of big data, the recommender reacts quickly.

Various investigations can be carried out with big data and AI. It uses numbers drawn from data around the world to predict future scenarios. They provide a correlation path to identify common symptoms that victims experience. New research is being done on symptoms that would help identify victims earlier. The data calculation makes it possible to collect the needle in a haystack that is imperceptible to the human eye. Save thousands of lives every day with new research by examining data and avoiding and learning from mistakes.