



AQI TO THE DEATH

Machine learning | How AQI impact to people

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The Problem area:

Can we use machine learning to predict how will the air quality index be in the next 5 years? Is there any relationship between air quality and health? Nowadays, we know what will impact air pollution. I would like to address the AQI and number of deaths in the world and compare between low AQI and high AQI areas.

The User:

The user will be the world population especially people in the high AQI area who are stressed from air pollution. The outcomes to be aware to create high chances of AQI.

The Big Idea:

The machine learning approach will be using historical AQI data, historical death causes data. And predict the relationship between air quality and the number of deaths which is assumed that caused by high AQI.

The Impact:

The results of this project should raise awareness of air pollution and reduce the number of deaths of people by at least 1%.

The Data:

Dataset from WHO database (Air quality index, number of deaths by cause, pollution, dust, wildfire)

Currently, I reference to datasets below.

- Air quality index year 2000 – 2019 from WHO
WHO. WHO Ambient Air Quality Database (update 2023). Version 6.0. Geneva, World Health Organization, 2023.
- Number of deaths by cause year 2015 – 2019 from WHO

Next step

- Study fact sheets and find some datasets about the causes of pollution and how they create bad air quality.

The Alternative:

Southeast Asia countries are faced with air pollution every year. People are aware of their health and many people reported that PM2.5 causes respiratory disease.