

DC21042 Abstract:

Our research aims to identify and analyse the relationships between COVID-19 indicators from the COVID-19 World Survey Data API to inform the audience about certain patterns and trends we found. The COVID-19 World Survey Data API contains 21 indicators recorded on a daily basis from the Schengen Area. We automated a script to consolidate the data for each country through iterative API calls. Each CSV file contains 23 columns including fields such as country name, date of each reporting, and the smoothed features for the specific indicator on each date. This data format allows us to cross compare the indicators in each country against one another, as well as against other countries. This format of data also allows us to perform multivariate time series forecasting using an LTSM (Long-Short Term Memory) algorithm from the Keras package in Python. Using data visualization tools will allow us the ability to express our findings of our technical work for the general public to easily understand and interpret. We will be attempting to predict the values of a chosen indicator based on other indicators. We will also cross compare the indicator values between countries to find insights into how their response to the pandemic affected these indicators, and how these indicators may uniquely impact one another in each country we analyze. Our analysis can help to prepare for a rise or fall in people experiencing symptoms and ultimately help policymakers and Public health officials in determining which country or region would benefit the most from added healthcare assistance.