Data Analytics and Machine Learning

Initial Project Proposal

COVID-19 IMPACTS ANALYSIS

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Title

The title of our project is Covid-19 Impacts Analysis.

Introduction

The COVID-19 pandemic, caused by the novel coronavirus, has had a profound impact on every aspect of human life, from health and economy to society and politics. The pandemic has resulted in millions of infections and deaths worldwide, and its impact is expected to be felt for years to come.

Given the scale and complexity of the COVID-19 pandemic, there is a need for rigorous analysis to understand its impact on different aspects of society. In this context, COVID-19 impact analysis has emerged as a critical area of research. The analysis involves examining the social, economic, political, and health-related impacts of the pandemic and identifying ways to mitigate its negative effects.

In this project, we aim to conduct a comprehensive COVID-19 impact analysis, focusing on a range of areas, such as healthcare, economy, education, and social behaviour. We will use data-driven methods and employ a variety of analytical techniques, such as machine learning, and data visualization, to identify the key factors that have contributed to the impact of the pandemic. Our objective is to provide insights and recommendations that can help policymakers, healthcare professionals, and individuals better understand the pandemic's effects and take effective measures to mitigate its impact.

Dataset

We are working on data for 170 countries with respect to the impact of covid-19 on the global economy.

Link for the dataset:

https://www.kaggle.com/datasets/shashwatwork/impact-of-covid19-pandemic-on-the-global-economy

Algorithms

Machine learning algorithms can be used for COVID-19 impacts analysis in several ways. For example, clustering algorithms can be used to identify groups of countries or regions that have similar COVID-19 impacts. Classification algorithms can be used to predict the likelihood of an individual or population being infected with COVID-19 based on demographic and other factors.

Software

We are using Python as programming language.

Expected Outcomes

Assessment of the effectiveness of different strategies used to mitigate the impact of COVID-19, such as social distancing, vaccination campaigns, and government stimulus packages.

Identification of the populations or regions that have been most affected by COVID-19, and the factors that have made them more vulnerable to the disease.

Conclusion

In conclusion the outcomes of a COVID-19 impacts analysis can inform policy decisions, guide public health interventions, and improve our understanding of

the long-term effects of the pandemic on society. It can also provide recommendations for policymakers and healthcare professionals on how to mitigate the impact of COVID-19 and prevent similar pandemics in the future.

Overall, a COVID-19 impacts analysis is a critical area of research that can help us better understand the impact of the pandemic on society and inform efforts to address its consequences.