HEALTH CARE PREDICTIVE ANALYSIS

YASHWANTH DASARARAJU

50333131

INTRODUCTION

- Increasing num and changing patterns of respiratory disorders provide a serious threat to worldwide public health. With the time, the complexity and dynamics of these diseases change, making manual analysis more and more difficult. Advanced prediction models are essential for efficiently addressing respiratory infections, as demonstrated by recent events like the COVID-19 pandemic.

- There are Many factors affect the diagnosis and treatment of respiratory illnesses. Especially in times of pandemics or outbreaks, traditional techniques are frequently ineffective to adequately capture the ever-changing nature of these infections. Furthermore, precise prediction and management techniques are made more difficult by the complex nature of respiratory disorders, which are impacted by environmental, genetic, and socioeconomic variables.

- Considering the difficulties caused by respiratory illnesses, the purpose of our study is to look at the following question: How can respiratory disease patterns be better understood and predicted with greater accuracy with the use of predictive modeling?

- Our hypothesis is that utilizing deep learning techniques and machine learning algorithms can greatly improve our capacity to assess and forecast changes in respiratory diseases. Through the use of extensive datasets with lung X-ray pictures labeled with different respiratory diseases, predictive models are trained, and we expect to achieve higher disease prediction accuracy and efficiency as compared to human processes.