### IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 9, May 2023

# **Disease Prediction using A Machine Learning**

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Abstract: Research on the application of computer systems to prediction, recommendation, and decisionmaking has grown in popularity during the past ten years. Medical science discoveries can be connected to recent developments in computer technology. Predicting medical behaviour is still a challenging undertaking, and it can only be accomplished with a medical professional's help. Every disease has a pattern in its occurrence that is based on its symptoms. This study's main objective is to propose a technique for using these patterns to predict the related diseases and the possible length of time required to treat them. This was based on the core notion that each disease symptom has a unique impact on the intensity and length of recovery. Using our system, we attempt to quantify this. Prediction is the act of anticipating the occurrence of an event based on a mathematical calculation. For this forecast, we need a recommender system. A program called a recommender system analyses input and, depending on the dataset used to train the program, finds patterns. Based on the pattern, the algorithm chooses a remedy for the problem. It might be unwise to create a database of every conceivable disease and its symptoms and base disease predictions on it. This method's primary drawback is how sluggish and inefficient it is, as well as how large the dataset it uses is. By combining patient ratings and symptoms, our method forecasts potential illnesses and their potential time to cure. Our approach is unique and superior because it predicts diseases based on the severity of the patient's symptoms and cure timeframes based on data from actual patients. Machine learning uses historical data to generate predictions. The process by which a computer program learns from data and experience is referred to as "machine learning." Testing and training are the two stages of the machine learning algorithm. Machine learning technology is still working through issues from decades ago when attempting to anticipate the disease from a patient's symptoms and from their past. Healthcare issues can be successfully solved with machine learning technologies. To keep track of patient health, we employ all machine learning methods that are currently available. Because it forecasts diseases based on the intensity of the patient's symptoms and cure times based on data from actual patients, our method is distinct and superior. Machine learning makes predictions using past data. Machine learning is the process through which a computer program learns from data and experience. The machine learning algorithm has two stages: testing and training. When attempting to predict the disease from a patient's symptoms and from their past, machine learning technology is still working through problems from decades ago. Machine learning technologies can be used to successfully resolve healthcare challenges. We use every machine learning technique currently available to monitor patient health.

#### Keywords: Machine learning

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