World Summit on DATA SCIENCE AND MACHINE LEARNING

January 10, 2023 | Webinar

The prediction of heart failure based on medical attributes using Machine Learning techniques and Data Mining attributes

Neeha Dewlok
Independent Institute of Education, South Africa

Statement of the Problem: The problem is that patients who are usually diagnosed with symptoms of high blood pressure, valve disease, thyroid disease, kidney disease, diabetes or heart defects present at birth are more commonly at risk of experiencing heart failure. The issue that needs to be dealt with is to ensure that enough blood is being pumped throughout the body considering that one of the above symptoms are causing deterioration to the body, resulting in the problem of death. There needs to be a solution as patients' needs to go for regular check-ups to maintain the state of the well-being of their body and to be able to identify the symptoms at an early stage, if there are any present. Many people are also in the dark about indirect symptoms that affect the manner in which heart failure is lightly shown, until there is a life-threatening situation. The use of predictive models, machine learning and data mining techniques are able to assist when patients attend regular check-ups. Thus data can be analyzed, alerting the patient about the problem which they have, preparing them for the future. In this study, the use of secondary data sources assisted in providing results and information and this was obtained from Kaggle. The datasets which were looked at included information and analysis on how further studies can be conducted. The researcher was not directly involved with participants of the study, but rather analyzed the data which was collected and performed a data analysis to produce reliable results. The researcher used pandas for python when performing analysis on the data. Results showed that there were some significant correlations found when using data mining to predict heart failure based on certain attributes.

Biography

Neeha Dewlok is a lecturer in Information Systems and technology at Varsity College Durban North. My passion is educating students about the wonderful world of technology. She has been in education for my whole career. My interests include the fields of data analytics and cyber security. She has hold a masters degree in Information Systems and Technology and am keen on entering the world of publishing.

DATASCIENCE CONGRESS 2023
January 10, 2023 Webinar

Journal of Computer Engineering &
Information Technology

Volume: 12

Page 6