LITERATURE SURVEY

Statistical Machine Learning approaches to Liver disease prediction

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2	Fazle Rabbi, S. M. Mahedy Hasan, Arifa Islam Champa, Kamrul Hasan	Prediction of Liver Disease Using Machine Learning Algorithms: A Comparative Study	ICAICT-2020
3	Varun Vats, Lining Zhang	A Comparative Analysis of Unsupervised Machine Techniques for Liver Disease Prediction	IEEE-2018
4	A.K.M Sazzadur Rahman,F. M. Javed Mehedi Shamrat, Zarrin Tasnim	A Comparative Study on Liver Disease Prediction Using Supervised Machine Learning Algorithms	ResearchGate-2019
5	Rakshith D B, Mrigank Srivastava, Ashwani Kumar, Gururaj S P	Liver Disease Predicition System Using Machine Learning Techniques	IJERT-2021

1.Diagnosing of Liver Disease Prediction in Patients using combined Machine Learning Models

Chokka Anuradha, D Swapna, Balamuralikrishnan Thati

IEEE-2022

In the human body one of the most important organs is the liver. If the regular functionality of the liver is disturbed then this condition is called disease-affected liver. Therefore, an early stage of disease detection is more important which helps in disease prevention at starting stage with small medications. But, it is too difficult to identify Liver disease at the early stages because symptoms are very less at the starting stage. Lab results with physical examination are involved in the Traditional methods. This paper aims to represent a Diagnosing for Liver disease prediction in Patients using Combined Machine Learning Models. Optimized three machine learning algorithms are used for the accurate diagnosis of liver disease and they are Artificial Neural Networks (ANN), Decision Trees, and K-Nearest Neighbors (KNN). With the help of these algorithms, given data is classified and results are produced. The future data is predicted with the help of past and present data. The accuracy results are produced by comparing three classification algorithms.

2.Prediction of Liver Disease Using Machine Learning Algorithms: A Comparative Case Study

Fazle Rabbi, S. M. Mahedy Hasan, Arifa Islam Champa, Kamrul Hasan.

ICAICT-2020

Liver, a crucial interior organ of the human body whose principal tasks are to eliminate generated waste produced by our organism, digest food, and preserve vitamins and energy materials. The liver disorder can cause various fatal diseases, including liver cancer. Here they have compared four different ML algorithms such as Logistic Regression, Decision Tree, Random Forest and Extra Trees for classifying Indian Liver Patient Dataset. Pearson Correlation Coefficient based features selection is applied to eliminate irrelevant features from the dataset. After comparing experimental results , we have found that boosting on ET provides the highest accuracy of 92.91%.

3. A Comparative Analysis of Unsupervised Machine Techniques for Liver Disease Prediction

Varun Vats, Lining Zhang

IEEE-2018

He considered three different ML (Machine Learning) algorithms. A comparison of these algorithms had been carried out for evaluating their forecasting accuracy and computing intricacy . These algorithms included AP (Affinity Propagation), K means and DBSCAN. This work was dedicated to the medical dataset based on lever disorders. This work made use of the Silhouette coefficient to measure the comparative efficiency of the considered algorithmic approaches

4. A Comparative Study on Liver Disease Predicition Using Machine Learning Algorithms

A.K.M Sazzadur Rahman, F. M. Javed Mehedi Shamrat, Zarrin Tasnim, Joy Roy, Syed Akhter Hossain

ResearchGate – 2019

Chronic Liver Disease is the leading cause of global death that impacts the massive quantity of humans around the world. This disease diagnosis is very costly and complicated. Therefore, this paper evaluates the performance of different Machine Learning algorithms in order to reduce the high cost of chronic liver disease diagnosis by prediction. Six machine learning techniques have been applied including Logistic Regression, K Nearest Neighbors, Decision Tree, Support Vector Machine, Naïve Bayes, and Random Forest. The performance was evaluated on different measurement techniques such as accuracy, precision, recall, f-1 score, and specificity and the result was that LR achieved the highest accuracy.

5. Liver Disease Prediction System using Machine Learning Techniques

Rakshith D B, Mrigank Srivastava, Ashwani Kumar, Gururaj S P

IJERT – 2021

In this paper risk of liver disease for a person is predicted based on the blood test report results of the user. With the dataset used for this project, 100 % accuracy is obtained for SVM model. The data preprocessing was done using Jupyter Notebook and Desktop Application was Implemented using Sypder IDE.The programming langauge which was used is python and machine learning Sklearn was used to build the model using classification algorithm like KNN,SVM,Naive Bayes and ANN.