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A Survey on Machine Learning Techniques for the Diagnosis of Liver Disease

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Abstract: Suffering from liver disease has been rapidly increasing due to excessive drink of alcohol, inhale polluted gas, drugs, contamination food and packing food pickle, so the medical expert system will help a doctor to automatic prediction. With the repeated development in machine learning technology, early prediction of liver disease is possible so that people can easily diagnosis the deadly disease in the early stage. This will give more useful in the Healthcare department and also a medical expert system can be used in a remote area. The liver plays a very important role in life which supports the removal of toxins from the body. So early prediction is very important to diagnosis the disease and recovers. Different types of machine learning, Supervised, Unsupervised and Semi- Supervised, Reinforcement Learning for diagnosis of liver disease such as SVM, KNN, K-Mean clustering, neural network, Decision tree etc and give difference accuracy, precision, sensitivity. The motive of this paper is to give a survey and comparative analysis of the entire machine learning techniques for diagnosis and prediction of liver disease in the medical area, which has already been used for the prediction of liver disease by various authors and the analysis are based on Accuracy, Sensitivity, Precision, and Specificity.

Keywords: Liver diagnosis, Machine learning, Expert System

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