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Disease Prediction using Machine Learning Algorithms

Mr.Sharan L Pais, Fayiz Ahmed K, Sharanya, Shrihastha, Varshith
Senior Assistant Professor, Department of Information Science and Engineering[1]
Students Department of Information Science and Engineering[2,3,4,5]
Alva's Institute of Engineering and Technology, Mijar, Mangalore, Karnataka, India

Abstract: *The development and exploitation of several prominent Data mining techniques in numerous real-world application areas (e.g. Industry, Healthcare and Bio science) has led to the utilization of such techniques in machine learning environments, in order to extract useful pieces of information of the specified data in healthcare communities, biomedical fields etc. The accurate analysis of medical database benefits in early disease prediction, patient care and community services. The techniques of machine learning have been successfully employed in assorted applications including Disease prediction. The aim of developing classifier system using machine learning algorithms is to immensely help to solve the health-related issues by assisting the physicians to predict and diagnose diseases at an early stage. A Sample data of 4920 patients' records diagnosed with 41 diseases was selected for analysis. A dependent variable was composed of 41 diseases. 95 of 132 independent variables (symptoms) closely related to diseases were selected and optimized. This research work carried out demonstrates the disease prediction system developed using Machine learning algorithms such as the Decision Tree classifier, Random forest classifier, and Naïve Bayes classifier. The paper presents the comparative study of the results of the above algorithms used.*

Keywords: Disease Prediction.

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