

Disease Prediction using Machine Learning

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Abstract: *Electronic data have accumulated as a result of the health care sector's widespread adoption of computer-based technology. Medical professionals struggle to effectively analyse symptoms and detect diseases at an early stage due to the vast volumes of data. However, machine learning (ML) algorithms have shown promise in outperforming current disease diagnosis methods and assisting medical professionals in the early detection of diseases. In order to extract pertinent information from the specified data for use in healthcare communities, biomedical fields, etc., these techniques are now used in machine learning environments as a result of their development and widespread use in a variety of real-world application areas (such as industry, healthcare, and bio science). The precise study of medical databases aids in the early diagnosis of diseases. The suggested system's goal is to significantly contribute to the resolution of health-related problems by supporting doctors in early disease prediction and diagnosis. For analysis, a sample set of 4920 patient records with diagnoses for 41 disorders was chosen. 41 diseases made up a dependent variable. 95 out of 132 independent variables (symptoms) that were highly connected to illnesses were chosen. Machine learning algorithms including Decision Tree classifier, Random Forest classifier, and Naive Bayes classifier are being used to construct the proposed system.*

Keywords: Prediction, Analysis, symptoms, Machine Learning, Diagnosis

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