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Cardiovascular Disease Prediction using Deep Learning and Feature Selection

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Abstract: *Due to a variety of alterations in human lifestyles, cardiovascular disease is one of the primary causes of death worldwide. If diagnosed early enough, heart disease can be minimised in about 90% of cases, giving doctors valuable insight about how to diagnose and treat patients. One of the best methods for making predictions is the use of machine learning. Studies on applying ML systems to forecast heart disease only look at the broad picture. Predicting the disease and its root cause is one of the toughest problems we face today. With the use of deep learning algorithms, we have developed an innovative approach in this study to recognise big datasets, improving the precision of cardiovascular disease prediction.In our model, feature selection and artificial neural networks have been used to predict cardiovascular diseases. Feature selection and ANN are two methods based on machine learning (ML) that can be used to select the most pertinent features from a dataset and give helpful prediction results. The accuracy of the two models, which are applied to analyse two distinct datasets, is 83% and 97.42%, respectively.*

Keywords: Artificial Neural Networks(ANN), Feature Selection, Cardiovascular Disease, Prediction

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