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| Title | Heart disease prediction and analysis using ensemble architecture | | |
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| Abstract |  |
| Throughout the world, cardiovascular diseases (CVDs) constitute the main cause of morbidity and mortality. We can reduce premature deaths by identifying those who are at risk of CVDs early. Machine learning has been proven to be proficient in predicting cardiac problems. As a result, developing a prediction model to detect cardiac disease before it progresses to a severe level will provide enormous hope to people all over the world and will help with decision-making. In the artificial neural network and machine learning, classification and regression are common prediction approaches. Most classifiers have flaws and difficulties. However, ensemble architecture could help weak algorithms increase their performance. So, in this study, we offer a unique ensemble architecture that uses a hard voting mechanism to improve performance. XGBoost (XGB), LogisticRegression, RandomForest, and the K-nearest neighbors (K-NN) algorithms are employed in the ensemble architecture. The proposed model scores were obtained with a 94% percent accuracy rate. | |