

YEAR	TITLE	AUTHOR DETAIL	TECHNIQUE USED	FUTURE ENHANCEMENT
2020	Heart Disease Prediction Using Machine Learning Algorithms	Parameswari	In this paper, various machine learning methods including Naive Bayes classifier, logistic regression, random forest, Support vector machine, decision tree classifier and KNN are employed to forecast heart disease. The Python language is used for implementation. The working of the model proposed	In the field of disease prediction, machine learning plays a significant role. In this paper, various machine learning approaches are used for heart disease forecast. The experimental results illustrate that the Random Forest algorithm achieves the highest accuracy of 91.8% and thus successfully achieving the objective of improving the prediction accuracy. The future work is towards more investigation on evolutionary computation techniques for the problem undertaken and study their performances.
2020	Enhanced Accuracy of Heart Disease Prediction using Machine Learning	Irfan Javid Ahmed Khalaf Zager Alsaedi Rozaida Ghazali	Deep learning and machine learning is advantageous for a divergent set of complications. One of the major application of these techniques is to predict the vulnerable variable from the values of autonomous variables.	This approach may be very useful to assist the doctors to investigate the patient cases in order to legitimize their prescription. The future work of this study can be performed with different mixtures of ML and DL models to better prediction.
2021	Prediction of Heart Disease Using Machine Learning Algorithms	Rachit Misra Pulkit Gupta Prashuk Jain	This paper shows the analysis of various machine learning algorithms, the algorithms that are used in this paper are K nearest neighbors (KNN), Logistic Regression and Random Forest Classifiers which can be helpful for practitioners or medical analysts for accurately diagnose Heart Disease. This paperwork includes examining the journals, published paper and the data of cardiovascular disease of the recent times. Methodology gives a framework for the proposed	In future the work are often enhanced by developing an internet application supported the Random Forest algorithm also as employing a larger dataset as compared to the one utilized in this analysis which can help to supply better results and help health professionals in predicting the guts disease effectively and efficiently.

2021	Rachana R Sanni Guruprasada	Analysis of performance metrics of heart failed patients using Python and machine learning algorithms	These models take request in the form of input data, analyze, process and then serve the response. It is the one that take request in the form of input data and then serves the response. The models can be trained over a set of data and the algorithms reason out and learn from this data. In this paper, mathematical models are given by; Logistic Regression, Decision Tree, KNN, and Random Forest are used for implementation.	As per the comparisons shown in the above Table the performance metrics of this paper are more accurate than the previous papers. Hence, the results of performance metrics meet the expectation of implementation. It is observed that the highest accuracy is obtained by decision tree, the highest precision is obtained by Logistic Regression and the highest recall is obtained by KNN. The random forest algorithm gives promising results across all the performance metrics.
2021	Prediction of GABA receptor antagonist-induced convulsion in cynomolgus monkeys by combining machine learning	Shoya Nagata Koichi Fujiwara Kazuhiro Kuga	This study was conducted under the approval of the Institutional Animal Care and Use Committee (IACUC), Shonan Health Innovation Park and conforms to the Guide for the Care and Use of Laboratory Animals published by the National Institutes of Health.	A convulsion alarm may be issued due to ECG artifacts caused by measurement failure or arrhythmia. Although we visually checked the collected ECG signals around the time of convulsion alarms, no artifacts or arrhythmia had occurred, which indicates that the convulsion alarms might not have been affected by artifacts or arrhythmia in this study.
2022	Automating and improving cardiovascular disease prediction using Machine learning	Qi Li Alina Campan Ai Ren Wael E	(LDL-C). The query identified every record of living patients who had a documented LDL-C level throughout the identified date range. Since statin treatment lower LDL-C values with expected percentages, we used a validated formula (last recorded LDL-C multiplied by 1.43) to calculate the estimated pretreatment LDL-C for all individuals with an active statin prescription at the time of the last recorded LDL	The query identified every record of living patients who had a documented LDL-C level throughout the identified date range. Since statin treatment lower LDL-C values with expected percentages, we used a validated formula (last recorded LDL-C multiplied by 1.43) to calculate the estimated pre-treatment LDL-C for all individuals with an active statin prescription at the time of the last
2022	A comparative study of classification and prediction of Cardio-Vascular Diseases (CVD) using Machine Learning and Deep Learning techniques	M. Swathy K. Saruladha	Deep learning, Matlab concepts	This survey paper is a consolidation of works done in the field of Prediction of Cardio-Vascular Diseases using Machine and Deep Learning Techniques. The lifestyle has changed over the past few years leading to a lot of health complications which goes unnoticed in major of the population. Taking right

				<p>measures at the right time can lead to save an individual's life. Heart Diseases form a vital part of mortality rate. These have no specific symptoms for their occurrences. This can be prevented by making custom lifestyle changes such as stop smoking, having a controlled BP, checking cholesterol rate, keeping diabetes under control, diet patterns and exercises and maintaining pressures and stress. The existing techniques and the workflow prediction is depicted as a overview</p>
2022	A predictive analytics approach for stroke prediction using machine learning and neural networks	<p>Soumyabrata Dev Hewei Wang Chidozie Shamrock Nwosue Nishtha Jain Bharadwaj Veeravalli Deepu John g</p>		<p>We have seen promising results from using just 4 features. The accuracy of the perceptron model cannot be improved further for primarily two reasons: lack of additional discriminatory feature set; and lack of additional dataset. We observed that most of the existing features in the EHR dataset are highly correlated to each other, and therefore do not add any additional information to the original feature space. Furthermore, a larger dataset will enable us to train our deep neural networks more efficiently. We plan to collect institutional data in our planned future work. The systematic analysis of the different features in the electronic health records will assist the clinicians in effective archival of the records. Instead of recording and storing all the features, the data management team can archive only those features that are essential for stroke prediction. Thus, in future, we plan to integrate the electronic records dataset with background knowledge on different diseases and drugs using Semantic Web technologies [22,23]. Knowledge graph technologies [23,24] can be used in order to publish</p>

				the electronic health records in an interoperable manner to the research community. The added background knowledge from other datasets can also possibly improve the accuracy of stroke prediction models as well.
2022	Diabetes & Heart Disease Prediction Using Machine Learning	BhaveshDhande Kartik Bamble Sahil Chavan Tabassum Maktum	Machine Learning, classification, feature selection, prediction, heart disease, diabetes	The system promises to handle and correlate both events of heart and diabetes to drive to quicker prediction using machine learning concepts .For heart disease, it can be concluded that the Voting Classifier of Decision Tree, Sigmoid SVC, and Adaboost has the highest accuracy of 88.57 % and for diabetes, the voting classifier has an accuracy of 80.95 %. The proposed methodology can be extended since it has a scope to conclude immunity of a patient from COVID through the study conducted. The development of a robust model with the help of automated feature selection to work on possibility of COVID through the analysis of both diseases can be carried out in future.
2018	A Review on Heart Disease Prediction using Machine Learning and Data Analytics Approach	M. Marimuthu M. Abinaya K. S. Hariesh K. Madhankumar V. Pavithra	Data mining, Heart disease, Machine learning, Medical centre.	There are many possible improvements that could be explored to improve the scalability and accuracy of this prediction system. Due to time limitation, the following research / work need to be performed for the future. Would like to make use of testing different discretization techniques, multiple classifier voting technique and different decision tree types namely information gain and gain ratio. Willing to explore different rules such as association rule, logistic regression and clustering algorithms.