# An Empirical Study to Predict Myocardial Infarction Using K-Means and Hierarchical Clustering 

Authors : Md. Minhazul Islam, Shah Ashisul Abed Nipun, Majharul Islam, Md. Abdur Rakib Rahat, Jonayet Miah, Salsavil Kayyum, Anwar Shadaab, Faiz Al Faisal<br>Abstract : The target of this research is to predict Myocardial Infarction using unsupervised Machine Learning algorithms. accuracy of the heart disease plays a vital role. From this concern, the authors have analyzed on a myocardial dataset to predict myocardial infarction using some popular Machine Learning algorithms K-Means and Hierarchical Clustering. This research includes a collection of data and the classification of data using Machine Learning Algorithms. The authors collected 345 instances along with 26 attributes from different hospitals in Bangladesh. This data have been collected from patients suffering from myocardial infarction along with other symptoms. This model would be able to find and mine hidden facts from historical Myocardial Infarction cases. The aim of this study is to analyze the accuracy level to predict Myocardial Infarction by using Machine Learning techniques.

Keywords : Machine Learning, K-means, Hierarchical Clustering, Myocardial Infarction, Heart Disease
Conference Title : ICMLT 2020 : International Conference on Machine Learning and Technology
Conference Location : Singapore, Singapore
Conference Dates : March 30-31, 2020

