

Abstract

This study proposes the use of a hybrid classification method in machine learning algorithms. the machine learning algorithm is an algorithm used in the machine learning process based on data. for the hybrid method using the ensemble learning method, namely the voting method. the voting method is a combination algorithm for predicting a class. This study aims to improve the results of machine learning algorithm classification accuracy in the classification process for the distribution of the number of dengue cases in the city of Bandung. The machine learning algorithm used in this research is Support Vector Machine (SVM), K-Nearest Neighbor (KNN), and Decision Tree (DT). The results obtained from the three algorithms are superior with KNN with an accuracy of 87%, SVM at 84%, and DT at 79%. by using the hard voting method approach, the accuracy increased to 91%. The proposed model can obtain better accuracy results from the three machine learning algorithms. The contribution of this research is to provide information that the hybrid classification of the number of dengue cases using a voting approach can increase the accuracy of the proposed model.

Keywords: Classification, Support Vector Machine, K-Nearest Neighbor, Decision Tree, Hybrid Classifier