

Abstract

Breast cancer is one of the deadliest diseases in the world. According to WHO data in 2013, breast cancer patients in the world increased from 12.7 million cases in 2008 to 14.1 million cases in 2012. While the number of deaths increased from 7.6 million people in 2008 became 8.2 million in 2012 [1]. Because the higher breast cancer is important to know and prevent the disease. This study uses data from "UCI - Machine Learning Repository Breast Cancer Wisconsin". Data classified are divided into 2 classes, namely benign breast cancer and malignant breast cancer. The purpose of this study is to classify the disease including benign or malignant categories based on existing data. This study uses the Wisconsin breast cancer dataset. The method used in this study is the Modified K-Nearest Neighbor (MKNN) algorithm. The test results show that the K value is very affect accuracy. Average accuracy tends to decrease if the value of K is increased and accuracy will increase if the training data is increased. The highest accuracy results in this test are 97.61% with K = 1 and training data 90%.

Keywords: breast cancer, Modified K-Nearest Neighbor(MKNN)