

Abstract

Cancer becomes one of the biggest cause of death. Basically in human body has cancer cells. However, what makes it bad is to grow and can cause damage organ. To the fix is with microarray DNA technology. DNA will read cancer cells based on gene expression. Gene expression data has a very large dimension. The method used for pre-processing is by reducing the dimensions of the data. Dimensional redundancy is performed with Particle Swarm Optimization (PSO) algorithm as feature selection. Furthermore, gene expression data will be classified using the Naïve Bayes algorithm. From the test results using Naive Bayes classifier algorithm with Particle Swarm Optimization (PSO) as feature selection then obtained a solution with an accuracy of 94%.

Keywords: classification, gene expression, Particle Swarm Optimization, Naïve Bayes