

Implementation of Hypothyroid Diagnosis System using Reduct Generation Algorithm

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Abstract

Thyroid is one of the most common diseases found in human being, it is not a deadly disease, but it is chronic disease which can give rise to other diseases. Hypothyroidism is simply not enough thyroid hormone and hyperthyroidism is too much. Thus, this system implements Hypothyroid Diagnosis system for people using reduct generation algorithm. In Reduct generation algorithm, reduct represents the minimal sets of features which are necessary to maintain the same classification power given by the original and complete set of features. It evaluates the importance of attributes, discovers the patterns of data, reduces all redundant objects and attributes, and seeks the minimum subset of attributes. Moreover, we analyze that reduct generation algorithm produces rule data sets which are less than the number of rules of decision table method in WEKA open software. In addition, accuracy result of this system is tested 94% covered by rule sets using holdout method.