METODE KLASIFIKASI BERSTRUKTUR POHON
DENGAN ALGORITMA CRUISE

Y A S M I N   E R I K A   F   D A N   A N D R I A N S Y A H

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Abstract. Two univariate split methods are proposed for the construction of classification trees with multyway splits named CRUISE (Classification Rule with Unbiased Interaction Selection and Estimation). A major strenght of the univariate split methods is that they have negligible bias in variable selection, both when the variables differ in the number of splits they offer and when they differ in number of missing values. This is an advantage because inference from the tree sructures can be adversely affected by selection bias. These methods also improve interpretability of trees by reducing tree depht.

Application of CRUISE algorithms to Fisher's Iris data is to predict the variety of an Iris flower based on its petal and sepal lenght and widht. Results show that it only takes one variable to do so. Therefoce, the new methods are highly competitive in terms of computational speed and classification accuracy of future observation.