Abstract

System pattern recognition is currently developed and widely used. One of the pattern recognition of familiar people is handwriting recognition. Indonesia, which has a rich cultural variety must have keanekaragraman separately in writing. Tulisan Bali is one of the writing area in Indonesia has a unique shape that is almost the same and only differed by one stroke line.

These problems built-recognition system made by applying the techniques of extraction feature algorithm based on vertex chain code and engineering classification using Sequence Alignment to recognize letters Bali correctly. Then analyze the characteristics and level of accuracy of recognition letters Bali and analyze the factors that affect the accuracy of recognition.

Algorithm vertex chain code is a method of describing contours of the object formed by the points of contour in the image in a rectangular cell into a series of codes that each element shows the number of vertex cell associated with the contour of the object in the image. Description of points of contour images made possible by tracing each point of contour and mengkodekannya a number of corner rectangular cells that make up that point.

The results showed that the algorithm based on vertex chain code can be used as a method of extracting features of the letters Bali because vertex chain code to describe each pattern with a chain code different. The accuracy of recognition is influenced by the method of detection side, the normalization of the size of the image, the method of sequence alignment, and normalization values match.

Keywords : balinesse character, vertex chain code, rectangular cell, sequence alignment.