ABSTRACT

Batik is one of the most well-known Indonesian cultures and national arts in foreign countries. Starting from west to east Indonesia, batik has motifs and patterns that have character. But unfortunately some people see batik motifs as the same motif, do not look unique and reduce interest in batik as our country's identity. It would be unfortunate if the community becomes passive and decreases their interest in batik, on this basis the purpose of this research is done. The classification of Motif batik has been made to increase the public's insight and interest to recognize the type of batik, especially Toraja Batik.

The process that has been carried out in this classification is by taking a batik motif image using a device then pre-processing. The data used in this study amounted to 40 in which there were 95 training data and 70 test data including 5 classes of Toraja batik motifs. Feature extraction uses the Singular Value Decomposition (SVD) method and the classification uses Learning Vector Quantization (LVQ). The batik motifs taken as data are five typical Motif batik motifs, which are then detected whether they match the motives of the extraction results which are classified as Motif batik motifs. Data and methods that have been designed are then simulated using Matlab.

The final result of the application design is that it can detect the type of batik from the image of the batik motif taken. In this study using the existing method, 81.42% accuracy results have been obtained.

Keywords: Toraja Batik, Image Processing, Matlab, Singular Value Decomposition, Learning Vector Quantization.