

ABSTRACT

Songket is a type of woven fabric derived from Malay and Minangkabau in Brunei Darussalam, Indonesia, and Malaysia. Songket has a wide variety of motif on each of the regions varies. On this final assignment done identification of types of motif fabric that comes from one of the areas in Indonesia namely Palembang. The system of classification songket is expected to help the layman to distinguish a Palembang songket with each other.

In this final task is discussed regarding techniques for classifying motifs songket by using digital image processing. Characteristic extraction method used is statistics and color histograms. The classification method used is K-Nearest Neighbor (K-NN). There are four main steps in processing such as image acquisition, preprocessing, feature extraction, and classification. The test is done by taking 270 songket samples with each class composition have 20 test images and 10 train images.

Parameter that measured in this final project are accuracy rate and computational time. In this final project, found out that the result has 100% accuration and 0.83s computation time using color histogram with parameters of quantization = 8 , the value of $k=1$, and the type of Cityblock.

Keywords : Songket, Color Histogram, K-Nearest Neighbor (K-NN), Cityblock