ABSTRACT

Fabric is the need of every person where the fabric has been around since the late Neolithic Age $(8000-2000 \text{ BC})^{[16]}$, until now there has been a lot of revolution shapes, colors and pattern that must have meaning in every generation However the most ordinary people do not know that every pattern fabric has a different meaning. Since that time research on how to identify the type of pattern fabrics from different regions have been carried out. Therefore, in this final project to identify the type of sarong pattern derived from one of the areas in Indonesia, Makassar.

This final project researching the differences pattern typical sarong of Makassar as well as make an application to identify the texture of some types unique sarong of Makassar so that ordinary people easily recognize the sarong. Based on the existing reference when identifying the texture of the fabric, the applied method is GLCM (Gray Level Co-occurrent Matrix) for part extraction characteristics and methods of KNN (K-Nearest Neighbor,) to process an image classification. The application is implemented through the application of android-based system to make it easier to use and more applicable.

This application has been able to identify pattern typical sarong Makkasar with the best accuracy when k = 1 at 91.67% with an angle of 90 ° distance 1 and computing time around 657 ms – 867 ms which the test using the gallery features.

Keyword : Unique Sarong Of Makassar, GLCM (Gray Level Co-occurrent Matrix), KNN (K-Nearest Neighbor)