Abstract

Duplicated region is one example of the case of destruction of an image by duplicating an object and transferred using a geometry transformation, so that the object can add or subtract a meaning. With the difficulty of discovering the authenticity of an image in this case, a system that can detect the case of a duplicated region is needed.

There is a reference to the duplicated region detection system that lacks running time that is relatively slow. A process that consumes a lot of time is a process of estimation. In this final project, proposed estimation process can minimize time consumption using Singular Value Decomposition.

The results of the MICC-F220 dataset evaluation showed that the system built in this study minimized the average consumption time of 16 minutes, with an average time of 138 minutes and an accuracy of 96.82%.

Keywords: duplicated region, consumption time, Singular Value Decomposition