Abstract

Digital image is one of the most frequently used media in information exchange. Therefore, its authenticity become important thing. Due to image processing tools growth, image forgery is getting easier to do. Based on that fact, an algorithm that capable to detect image forgery is needed.

One of common technique in image forgery is region duplication. Region duplication is performed by copying an area of image and paste it on other position within same image. On previous works, duplicated region detection has done using cellular automata [1]*, discrete cosine transform* [2] *and local binary pattern* [3]*. But, all of them didn't handling rotated region. This research performs duplicated region detection in image using Local Binary Pattern Rotation-Invariant (LBP_{RI}) for feature extraction phase and Histogram Intersection for matching phase.*

This system using combination of dataset from previous research [3]*, downloaded from various sources and self-made dataset. Based on testing process using that dataset, the system reaches 60,00% of accuracy.*

Keywords: *image forgery, detection, duplicated region, local binary pattern, rotation*