

Abstract

Extreme growth of the Internet has made the process of data transmission, distribution and access to digital media content become easier. However, many of us find parts of videos that may be part of someone's copyright. So, it attracts researchers in the field of video copy detection. The existing works have focused only try to detect modification on content and temporal domain of video. We still have not found any attempt to try to detect modifications in the spatial domain. In this research, we proposed to use DCT as a video features to detect modification on the spatial domain. To reduce searching computational cost, we proposed a scheme to extract key frames. For the experiment, we collected 1556 video clips which consist of static and dynamic scenes, and we cut up to 10% spatially on the top, bottom, left and right sides of the video clips. The experimental results show that we have achieved perfect detection in 3 key frame samples and 14% spatially cut video clips.

Keywords: Video Fingerprint, Spatial Modification, DCT, Key frame.