Abstract

At present, the security system using face detection as the primary key code security can be hacked easily by spoofing the face image shows the front of the camera. Image face spoofing can be obtained by a person's face print image or video to break through the security system. Research on anti-spoofing face detection has been done by various methods one using Local Binary Pattern (LBP).

In this study the authors wanted applying texture analysis based on Local Binary Pattern (LBP). In previous studies that use LBP focuses only on grayscale color space only, this study focuses on analyzing the luminance and color of the face image is kromasi using YCbCr and HSV color space. Features LBP histogram is taken by each plan color image separately and combined into a feature that can distinguish spoofing face with a real face or nonspoofing . With the color space can provide a promising feature extraction feature.

The dataset used in this thesis is NUAA imposter Photograph Database. With the approach of the method applied in this research, the system managed to get an accuracy of 94.12%.

***Keywords**: face spoofing , YCbCr color space and HSV, Local Binary Pattern (LBP)*