

ABSTRACT

Biometrics provide tools and techniques for recognizing identities based on physical and behavior attributes of human automatically. One physical identity in biometric systems is face, because it is something natural and unique that is owned by every human. But in the development of internet technology, human face videos can be easily downloaded from internet and thus making biometric systems vulnerable to be attacked by imposter. Falsifying human face to get illegal access of biometric systems can be done by displaying human face video on the monitor called Spoofing. To solve that problem, author build a face spoofing detection system through Visual Rhythm analysis and Local Binary Pattern (LBP) extraction feature method and Support Vector Machine (SVM) classification method. Result of the system. The result of the system determining the face contained in the video is real face (non-spoof) or fake face or face that displayed on the monitor (spoof). From the experiment using hold scheme, author get 100% accuracy of testing datasets, with visual rhythm horizontal direction, height 10px crop frame, 40 number of frames, LBP with 8 number of point and 2 number of radius, and kernel SVM type is linear kernel.

Keyword: *Biometric, Spoofing, Video, Visual Rhythm Analysis, Local Binary Pattern, Support Vector Machine.*